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- (71) Applicant (for all designated States except US): FICO CABLES S.A. [ES/ES]; Technological Centre Pujol & Tarragó, Poligono Industrial Can Margarola, Ctra. C-17 km 13, E-08100 Mollet del Vallès (ES).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BARRIOS VILLÁ, Josep [ES/ES]; C/Bages 3, E-08233 Vacarisses (ES). TERRADAS PRAT, Jaume [ES/ES]; C/Rosselló 492, 2° 2a, E-08025 Barcelona (ES). SANCHEZ REVILLA, Eduardo [ES/ES]; C/Serra Camaro 18, E-08026 Sabadell (ES). GRAS, David, Alonso [ES/ES]; Av. Rius i Taulet 34, 3° 3a, E-08190 Sant Cugat del Vallés (ES). PARDO

ALOY, David [ES/ES]; Av. Bertomeu 27, E-08193 Bellaterra (ES). JORNET VIDAL, Jordi [ES/ES]; C/Galvani 110, 3° 3a, E-08224 Terrassa (ES).

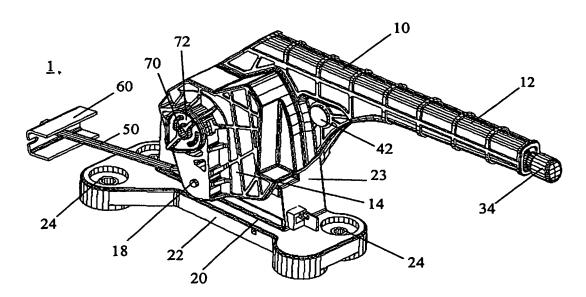
- (74) Agent: HESS, Peter, K.; Bardehle, Pagenberg, Dost, Altenburg, Geissler, Galileiplatz 1, 81679 München (DE).
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(54) Title: PARKING BRAKE LEVER UNIT



(57) Abstract: The present Invention relates to a parking brake lever unit 1 for the use in a motor vehicle, comprising a parking brake lever 10 made of plastic material, a support 20 made of plastic material, at which the parking brake lever 1 is pivotably supported and a locking unit 40, 26, comprising a pawl 40, which is mounted at the parking brake lever 10, and a ratchet insert 26, wherein the ratchet insert 26 comprises of a metal and is over molded within the support 20.

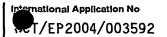
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B. FIELDS SEARCHED

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Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
A	EP 0 499 494 A (ROCKWELL AUTOMOTIVE BODY SYST) 19 August 1992 (1992-08-19) cited in the application abstract; figures 1,3		
A	EP 0 933 270 A (FICO CABLES SA) 4 August 1999 (1999-08-04) cited in the application abstract; figure 7	1	
A	EP 0 251 149 A (FOGGINI PROGETTI) 7 January 1988 (1988-01-07) cited in the application abstract; figures 1,3	1	
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X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
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Date of the actual completion of the international search	Date of mailing of the international search report
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C.(Continu	C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT							
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.						
A	GB 1 237 205 A (VAUXHALL LTD) 30 June 1971 (1971-06-30) figure 1 column 2, paragraph 72 - paragraph 91	1						
Α	DE 43 21 610 A (UNITED CARR GMBH TRW) 19 January 1995 (1995-01-19) abstract; figure 3	1						
A	US 5 950 496 A (RAMPP ARMIN) 14 September 1999 (1999-09-14) figure 3	1						

INTERNATIONAL SEARCH REPORT

International Application No EP2004/003592

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
EP 0499494	Α	19-08-1992	FR	2672554 A1	14-08-1992
			BR	9200443 A	20-10-1992
			CA	2060450 A1	12-08-1992
			DE	69202264 D1	08-06-1995
			DE	69202264 T2	25-01-1996
			EP	0499494 A1	19-08-1992
			ES	2074833 T3	16-09-1995
			JP	4310456 A	02-11-1992
			MX	9200565 A1	01-08-1992
			US 	5205184 A	27-04-1993
EP 0933270	Α	04-08-1999	ES	2134124 A1	16-09-1999
			AU	4016097 A	15-05-1998
			BR	9714617 A	09-05-2000
			EP	0933270 A1	04-08-1999
			US	6260435 B1	17-07-2001
			WO	9817512 A1	30-04-1998
EP 0251149	A	07-01-1988	IT	208021 Z2	31-03-1988
			EP	0251149 A2	07-01-1988
			JP	63025160 A	02-02-1988
			US	4770057 A	13-09-1988
GB 1237205	Α	30-06-1971	NONE		
DE 4321610	Α	19-01-1995	DE	4321610 A1	19-01-1995
US 5950496	A	14-09-1999	DE	9405849 U1	18-05-1995
			DE	59500863 D1	27-11-1997
			WO	9527642 A1	19-10-1995
			EΡ	0754135 A1	22-01-1997
			ES	2108580 T3	16-12-1997